



MA014G

Algebra and Discrete Mathematics

Assignment 6

To get the bonus points you must submit your solutions by 10am on Wednesday 24 October 2007.

Question 1

Solve exercise 6.2.23 (6.2.23) [8.2.23] in [J].

Question 2

Solve exercise 6.3.11 (6.3.11) [8.3.11] in [J].

Question 3

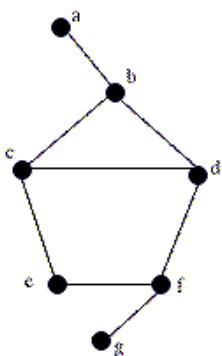
(a) Solve exercise 6.4.3 (6.4.3) [8.4.3] in [J]. Show your working! In particular, make sure that your solution shows in which order the vertices are chosen and how the labels change as you work your way through the algorithm.

(b) Find also (by using either Kruskal's or Prim's algorithm) a minimal spanning tree for the weighted graph from (a).

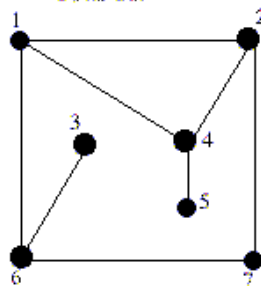
Question 4

Justifying your answer, say whether the graphs G and H below are isomorphic.

Graf G:



Graf H:



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